

APPENDIX D
WORKSHOP AGENDA



Shrimp Virus Peer Review Workshop

Crystal Gateway Marriott Hotel
Arlington, VA
January 7-8, 1998

Agenda

W E D N E S D A Y , J A N U A R Y 7 , 1 9 9 8

Workshop Chair: Dr. Charles Menzie

- 8:00AM **Registration**
- 8:30AM **Welcome and Introductory Remarks** *Dr. Charles Menzie,
Menzie Cura & Associates
Chelmsford, MA*
- 8:40AM **Opening Remarks** *Meryl Broussard
Representative from the Joint Subcommittee on Aquaculture (JSA)*
- 8:45AM **Logistical Information** *Beth O'Connor
Eastern Research Group, Inc. (ERG)
Lexington, MA*
- 8:50AM **Introduction of Experts** *Dr. Charles Menzie*
- 9:05AM **Introduction and Background** *Dr. Kay Austin
National Center for Environmental Assessment
U.S. Environmental Protection Agency (U.S. EPA)
Washington, DC*
- 9:20AM **Summary of Modified Aquatic Nuisance
Species Task Force Risk Assessment Approach** *Dr. Richard Orr
JSA Shrimp Virus Work Group Representative
U.S. Department of Agriculture
Riverdale, MD*
- 9:40AM **Questions and Comments**



9:50AM **Management Goals, Assessment Endpoints and Conceptual Model**

10:20AM BREAK

- Aquaculture Virus Pathways and Sources *Dr. Wayne Munns*
U.S. EPA, Narragansett, RI
- Shrimp Processing Virus Pathways and Sources *Dr. Jack Gentile*
University of Miami
Miami, FL
- Other Virus Pathways and Sources *Dr. Anne Fairbrother*
ecological planning and toxicology, inc.
Corvallis, OR
- Viral Stressors and Cross-Cutting Issues *Dr. Anne Fairbrother*
- Stressor Effects and Cross-Cutting Issues *Dr. Anne Fairbrother*

12:00PM LUNCH

Probability of Establishment (discussion topic 1)

Aquaculture	Dr. Wayne Munns, Leader
Shrimp Processing	Dr. Jack Gentile, Leader
Other Sources	Dr. Anne Fairbrother, Leader

2:45PM Breakout Sessions Reconvene to Discuss Consequences of Establishment (discussion topic 2)

Aquaculture	Dr. Wayne Munns, Leader
Shrimp Processing	Dr. Jack Gentile, Leader
Other Sources	Dr. Anne Fairbrother, Leader

4:15PM Plenary Session Reconvenes: Progress Reports From Breakout Discussion Leaders

4:45PM **Observer Comments**

5:15PM ADJOURN

THURSDAY, JANUARY 8, 1998

8:30AM **General Announcements/Review Day Two Charge** *Dr. Charles Menzie*

8:45AM **Breakout Discussions Convene to Develop Risk Assessment** (discussion topic 3)
Aquaculture *Dr. Wayne Munns, Leader*
Shrimp Processing *Dr. Jack Gentile, Leader*
Other Sources *Dr. Anne Fairbrother, Leader*

10:45AM B R E A K

11:00AM **Plenary Session Convenes to Discuss Breakout Discussion Findings**

12:00PM LUNCH

1:00PM **Plenary Session Reconvenes to Review Premeeting Comments on Comprehensive Risk Assessment and Critical Research Needs**

3:15PM BREAK

3:30PM **Plenary Session Reconvenes to Discuss Breakout Discussion Findings**

4:00PM **Observer Comments**

4:30PM **Workshop Wrap-Up**

4:45PM ADJOURN

APPENDIX E

PRESENTATION MATERIALS ON THE RISK ASSESSMENT PROCESS
DEVELOPED BY THE AQUATIC NUISANCE SPECIES TASK FORCE

Prepared by:

Richard Orr
USDA-APHIS

Lofty Goals

PATHWAY EVALUATION -- Develop a set of criteria to help prioritize pathways that present a risk for introducing non-indigenous aquatic organisms.

RISK ASSESSMENT -- Develop a process that can be used to:

- a) evaluate recently established non-indigenous organisms
- b) evaluate non-indigenous organisms proposed for deliberate introduction
- c) evaluate the risk associated with individual pathways

RISK MANAGEMENT -- Develop a practical operational approach to maximize a balance between protection and the available resources for:

- a) reducing the probability of unintentional introductions
- b) reducing the risk associated with intentional introductions

Current and Former Members of the Risk Assessment and Risk Management Committee

Walter Blogoslawski
NOAA, National Marine Fisheries Service
Former Member

Joseph McCraren
National Aquaculture Association
Former Member

Richard Guadiosi
U.S. Coast Guard
Former Member

Fred Kern
NOAA National Marine Fisheries Service
Current Member

Richard Orr
USDA, Animal and Plant Health Inspection Service
Current Member, RAM Chairperson

Edwin Theriot
U.S. Army Corps Of Engineers
Current Member

Mike Troyer
U.S. Environmental Protection Agency
Former Member

James D. Williams
USGS Biological Resources Division
Current Member

Richard E. Bohn
National Aquaculture Association
Current Member

Sharon Gross
U.S. Fish and Wildlife Service
Former Member

Lauren Kabler
U.S. Coast Guard
Former Member

Marshall Meyers
Pet Industry Joint Advisory Council
Current Member

Richard Sayer Jr.
U.S. Fish and Wildlife Service
Former Member

Jay Troxel
U.S. Fish and Wildlife Service
Current Member

Bill van der Schalie
U.S. Environmental Protection Agency
Current Member

**RISK - IS THE LIKELIHOOD AND MAGNITUDE OF AN ADVERSE
EVENT**

**RISK ANALYSIS - THE PROCESS THAT INCLUDES BOTH RISK
ASSESSMENT AND RISK MANAGEMENT**

RISK ASSESSMENT - THE ESTIMATION OF RISK

**RISK MANAGEMENT - THE PRAGMATIC DECISION MAKING
PROCESS CONCERNED WITH WHAT
TO DO ABOUT THE RISK**

Assessment Criteria

- o Comprehensive
- o Logically sound
- o Practical
- o Conducive to learning
- o Open to evaluation

Example of Risk Assessments that used the Generic Process

I. COMMODITY ASSESSMENTS:

USDA FOREST SERVICE. 1991. Pest Risk Assessment of the Importation of Larch from Siberia and the Soviet Far East. Miscellaneous Publication No. 1495

USDA FOREST SERVICE, 1992. Pest Risk Assessment of the Importation of *Pinus radiata* and Douglas-fir Logs from New Zealand. Miscellaneous Publication No. 1508

USDA FOREST SERVICE. 1993. Pest Risk Assessment of the Importation of *Pinus radiata*, *Nothofagus dombeyi* and *Laurelia philippiana* Logs from Chile. Miscellaneous Publication No. 1517

II. SPECIFIC ORGANISM ASSESSMENT:

Huettel, R.L.; Griffin, R.L. and Caplen R.T. 1993. Pest Risk Analysis for Pea Cyst Nematode. USDA APHIS PPQ/PPD risk assessment, 15p.

Lehtonen, P. 1993. Pest Risk Assessment on Chinese Water Spinach- USDA APHIS PPQ risk assessment, 22p.

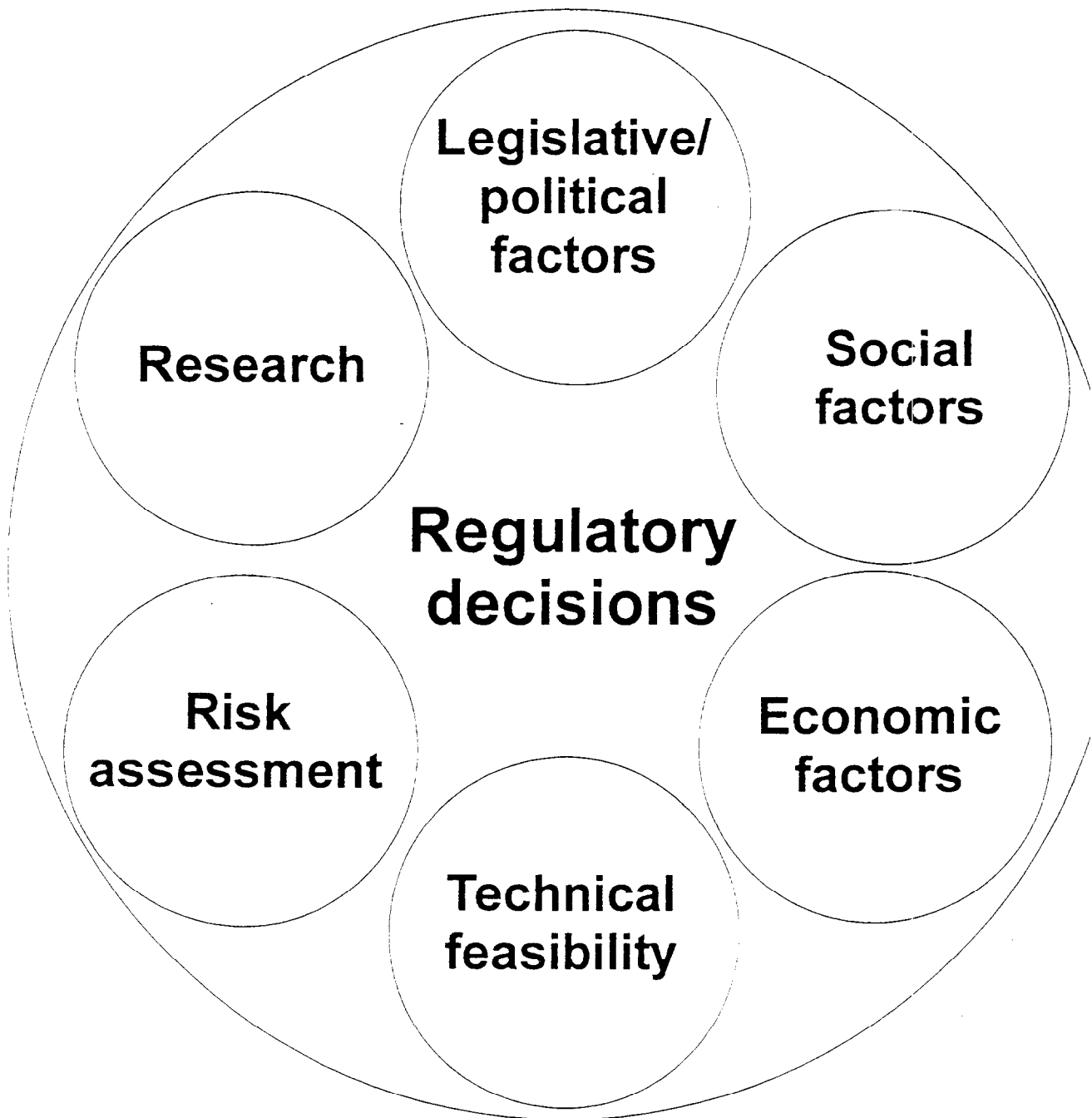
Orr, R.L. and Cohen, S. 1991b. Pest Risk Assessment on Potato Virus Y-N. APHIS PPD risk assessment, 14p.

Orr, R.L. 1991a. Pest Risk Assessment on Apple Ermine Moth. USDA APHIS PPQ risk assessment, 15p.

Orr, R.L. 1991b. Pest Risk Assessment on Cherry Bark Tortrix. USDA APHIS PPQ risk assessment, 13p.

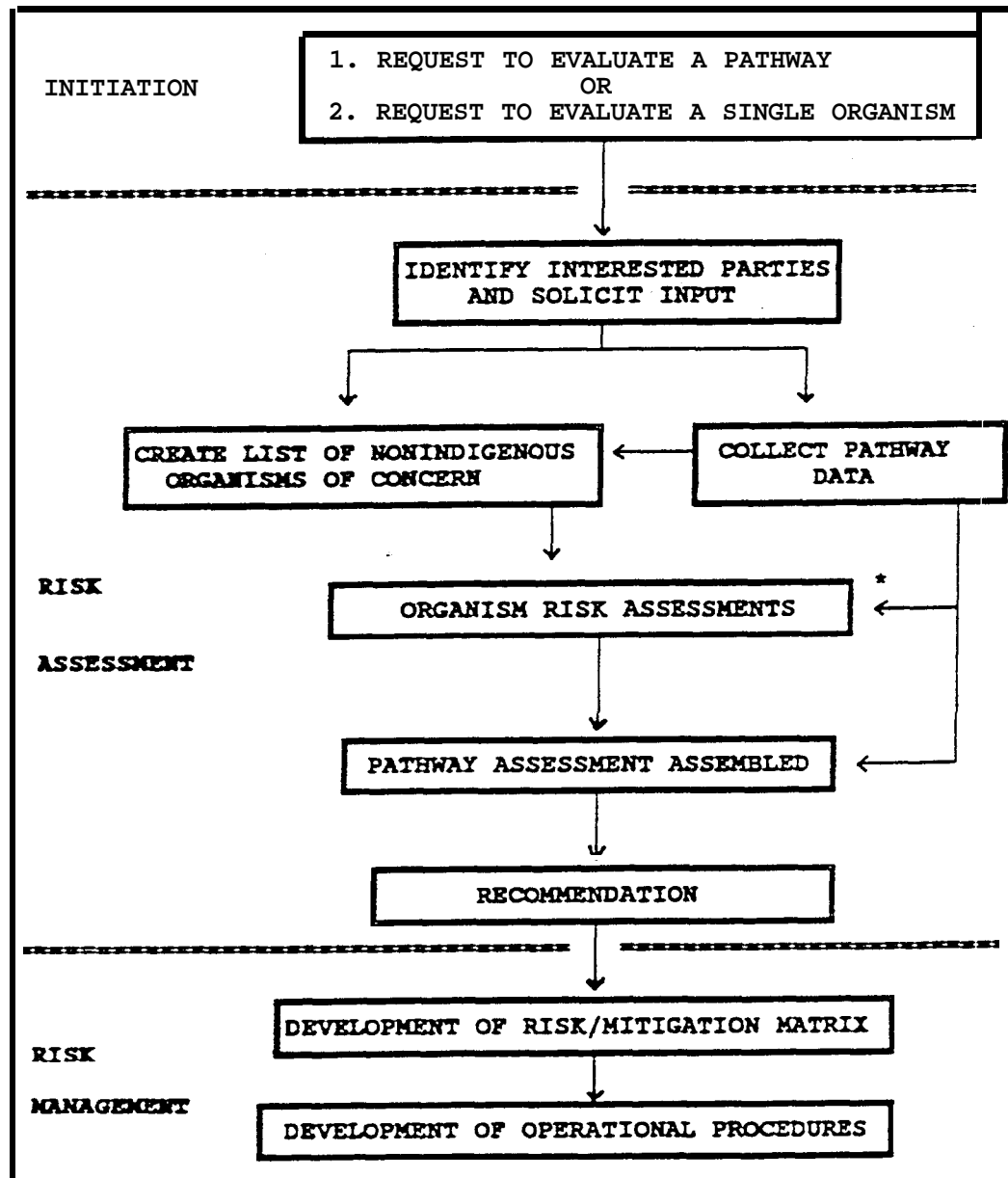
Schall, R.A. 1991. Pest Risk Assessment on Karnal Bunt. USDA APHIS PO risk assessment, 14p.

Schall, R.A. 1992. Pest Risk Assessment on Larch-Poplar Rust- USDA APHIS PO risk assessment, 17p.



Elements in risk management

FIGURE 1. Pathway Analysis: Flow Chart showing the Initiation, Risk Assessment and Risk Management for a pathway.



* = For details on the Organism Risk Assessment see Figure 2 "Risk Assessment Model" page 11. Pathways that show a high potential for introducing nonindigenous aquatic organisms should trigger detailed risk analyses.

Creating a List of Nonindigenous Aquatic Organisms of Concern

The next element in figure 1 (page 8) is "Create List of Nonindigenous Organisms of Concern". The following generalized process is recommended .

STEP:1) Determine what Organisms are associated With the pathway.

2) Determine which of these organisms qualify for further evaluation using the table below.

Category	Organism Characteristics	Contract
1a	species nonindigenous not present in country (United States)	yes
1b	species nonindigenous, in country and capable of further expansion	yes
1c	species nonindigenous, in country and reached probable limits of range, but genetically different enough to warrant concern and/or able to harbor another nonindigenous pest	yes
1d	species nonindigenous, in country and reached probable limits of range and not exhibiting any of the other characteristics of 1c	no
2a	species indigenous, but genetically different enough to warrant concern and/or able to harbor another non-indigenous pest, and/or capable of further expansion	yes
2b	species indigenous and not exhibiting any of the characteristics of 2a	no

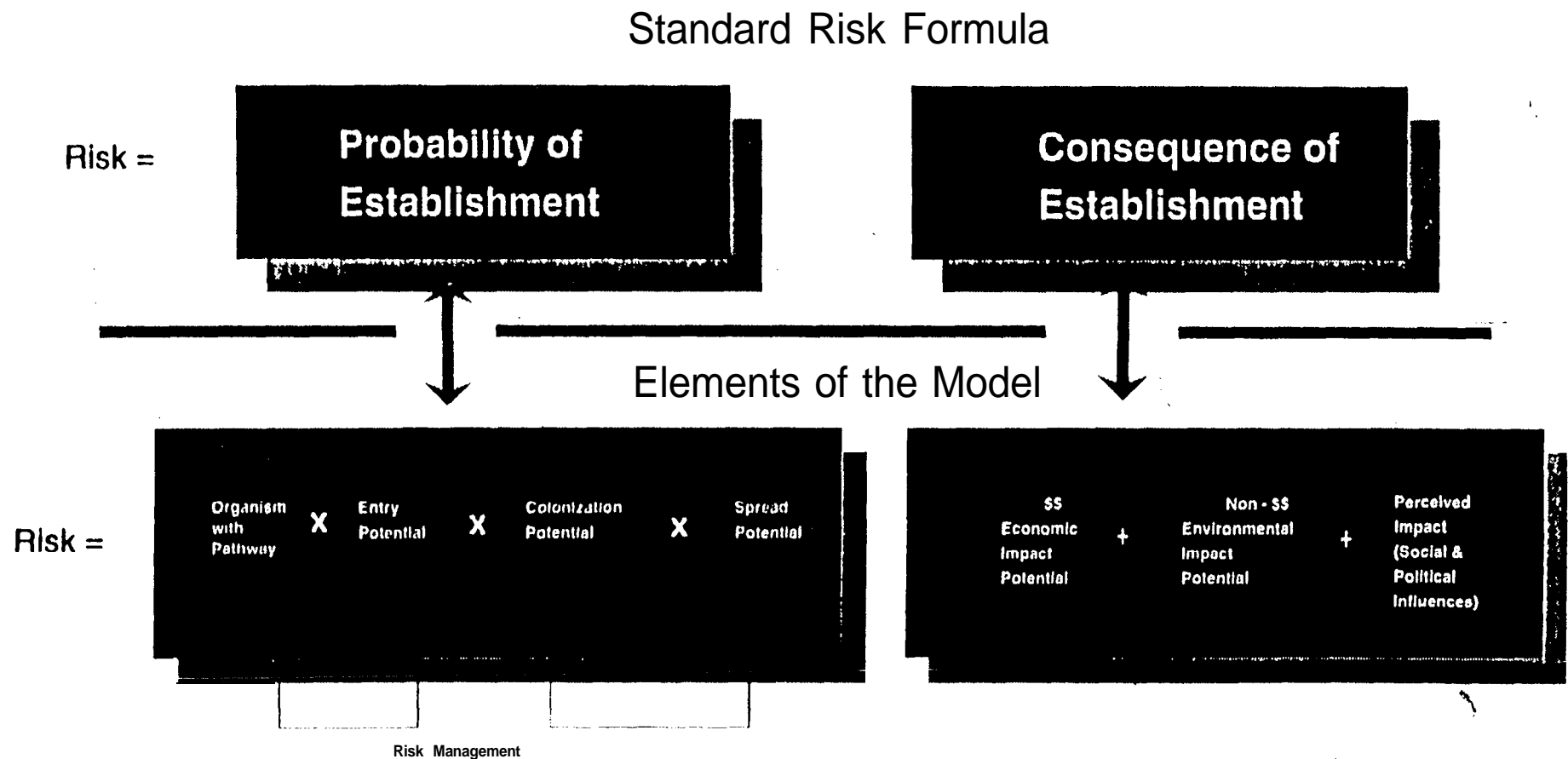
3) Produce a list of the organisms of concern from (step 2) categories 1a, 1b, 1c, and 2a, Taxonomic confusion or uncertainty should also be noted on the list.

4) Conduct organism Risk Assessments from the list of organisms developed in step3.

Based on the number of organisms identified and the available resources, it may be necessary to focus on fewer organisms than those identified using the above table. When this is necessary it is desirable that the organisms chosen for complete risk assessments be representative of all the organisms identified. A standard methodology is not available because the risk assessment process is often site or species specific. Therefore, professional judgement by scientists familiar with the aquatic organisms of concern is often the best tool to determine which organisms are necessary for effective screening.

FIGURE 2

Risk Assessment Model



- For model simplification the various elements are depicted as being independent of one another
- The order of the elements in the model does not necessarily reflect the order of calculation

REFERENCE CODES TO ANSWERED QUESTIONS

Reference code	Reference Type
(G)	General Knowledge, no specific source
(J)	Judgmental Evaluation
(E)	Extrapolation; information specific to pest not available; however information available on similar organisms applied
(Author, Year)	Literature Cited

UNCERTAINTY CODES TO INDIVIDUAL ELEMENTS

Uncertainty Code	Symbol	Description
Very Certain	VC	As certain as I am going to get
Reasonably Certain	RC	Reasonably certain
Moderately Certain	MC	More certain than not
Reasonably Uncertain	RU	Reasonably uncertain
Very Uncertain	VU	A guess

WORKSHEET FOR REVIEW PROCESS

IV. Rating Elements of the Review Risk Model

A. PROBABILITY OF ESTABLISHMENT

- **The probability of the organism being on, with or in the pathway:**
Ranking = Uncertainty code =
- **The probability of the organism surviving in transit and successfully surviving current regulatory mitigation systems:** Ranking = Uncertainty code =
- **The probability of the organism successfully colonizing:**
Ranking = Uncertainty code =
- **The probability the organism will be able to spread beyond the colonized area:**
Ranking = Uncertainty code =

B. CONSEQUENCES OF ESTABLISHMENT

- **The economic impact if established:**
Ranking = Uncertainty code =
- **The environmental impact if established:**
Ranking = Uncertainty code =
- **The impact from social and/or political influences:**
Ranking = Uncertainty code =

C. OVERALL ORGANISM RISK POTENTIAL RATING = Uncertainty code =

V. Specific Questions:

VII. Recommendations: